ATTACHMENT A FACILITY DESCRIPTION

TABLE OF CONTENTS

LIST	Γ OF FIGURES	ii
LIST	F OF ABBREVIATIONS/ACRONYMS	iii
FAC	CILITY DESCRIPTION	A-1
A.1	TA-16 GENERAL DESCRIPTION	A-1
A.2	TRAFFIC PATTERNS	A-2
	A.2.1 Routes of Travel	A-2
	A.2.2 Traffic Volumes	A-2
	A.2.3 Traffic Control Signals	A-2
	A.2.4 Road Surfacing and Load-Bearing Capacity	A-2
A.3	LOCATION INFORMATION	A-3
	A.3.1 Seismic Standard	A-3
	A.3.2 Floodplain Standard	A-3
A.4	TOPOGRAPHIC MAPS	A-3
A.5	GROUNDWATER MONITORING	A-4
A.6	OTHER PERMIT ACTIVITIES	A-4
A.7	REFERENCES	A-4

LIST OF FIGURES

<u>FIGURE NO</u> .	<u>TITLE</u>
A-1	Location Map of Technical Area (TA) 16 at Los Alamos National Laboratory (LANL)
A-2	Site Location Map of Technical Area (TA) 16 Burn Ground
A-3	Technical Area (TA) 16 Open Burning Units
A-4	Location Map of Access Roads and Traffic Control Signs in the Vicinity of the Technical Area (TA) 16 Burn Ground
A-5	Contour Map Showing the Location of the Hazardous Waste Units at Technical Area (TA) 16
A-6	Annual Wind Roses for Los Alamos National Laboratory Daytime (2002)
A-7	Annual Wind Roses for Los Alamos National Laboratory Nighttime (2002)
A-8	Location Map of Access Gates, HE Exclusion Area Boundary, and Security Fences in the Vicinity of Technical Area 16
A-9	Drainage Control Features for the Technical Area (TA) 16 Burn Ground

Document: LANL TA-16 Part B

Revision No.: 4.0

Date: June 2003

LIST OF ABBREVIATIONS/ACRONYMS

20.4.1 NMAC New Mexico Administrative Code, Title 20, Chapter 4, Part 1

AASHTO American Association of State Highway and Transportation Officials

HE high explosives

LANL Los Alamos National Laboratory

OB open burning

TA technical area

ATTACHMENT A FACILITY DESCRIPTION

The information provided in this attachment is submitted in accordance with the applicable requirements of the New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20.4.1 NMAC), revised June 14, 2000 [6-14-00]. The following subject areas are addressed in this attachment:

- A general description of Technical Area (TA) 16 at Los Alamos National Laboratory (LANL) [20.4.1 NMAC § 270.14(b)(1)];
- Site-specific traffic patterns, volume, and control [20.4.1 NMAC § 270.14(b)(10)];
- Site-specific location information for compliance with the seismic and floodplain standard requirements [20.4.1 NMAC § 270.14(b)(11), and 20.4.1 NMAC § 264.18(a) and (b)];
- Site-specific topographic map requirements [20.4.1 NMAC § 270.14(b)(19)];
- Site-specific groundwater monitoring and protection information [20.4.1 NMAC § 270.14(c), and 20.4.1 NMAC § 264.90(a)].

A LANL-wide facility description addressing additional regulatory requirements is provided in Appendix A of the most recent version of the "Los Alamos National Laboratory General Part B Permit Application," hereinafter referred to as the LANL General Part B.

A.1 TA-16 GENERAL DESCRIPTION [20.4.1 NMAC § 270.14(b)(1)]

TA-16 is located in the southwestern portion of LANL (Figure A-1). It is situated on a broad mesa that is bounded on the north by Cañon de Valle, on the south by State Road 4 and Bandelier National Monument, and on the west by West Jemez Road (State Road 501) and the Santa Fe National Forest. Elevation ranges from approximately 7,700 feet at the west end of the TA to approximately 6,800 feet at the lower east end. Topography is varied, ranging from steep precipitous canyon walls to sloping mesa tops.

The open burning (OB) units at TA-16 are shown on Figures A-2 and A-3. The TA-16 OB units include the TA-16-388 Flash Pad and the TA-16-399 HE Burn Tray. The TA-16-388 Flash Pad is where high explosives (HE) contamination is removed from excess equipment or scrap, HE-contaminated liquids and dry HE are burned, and wet HE is dried and burned. The TA-16-399 HE Burn Tray is used for the destruction of solid HE material. Descriptions of these two units are provided in Section 2.0 and Attachment G of this permit renewal application.

A.2 TRAFFIC PATTERNS [20.4.1 NMAC § 270.14(b)(10)]

General traffic pattern information, traffic volumes, and traffic control signals for the LANL-wide facility are provided in Appendix A of the LANL General Part B.

A.2.1 Routes of Travel

The primary traffic routes that may be used to transport hazardous waste to or from the OB units at TA-16 include Pajarito Road, Trinity Drive (State Road 502), Diamond Drive, West Jemez Road (State Road 501), Anchor Ranch Road, K-Site Road, State Road 4, and East Jemez Road (see Map 1 in the most recent version of the "Los Alamos National Laboratory General Part A Permit Application" [hereinafter referred to as the LANL General Part A] and Figure A-4 herein).

A.2.2 Traffic Volumes

Due to the nature of operations at TA-16 and because the TA is in a secured area, the traffic volume in the area of the Burn Ground is kept to an absolute minimum to conduct safe treatment operations. Vehicle types are generally cars, light- and medium-duty trucks, vans, tank trucks, dump trucks, and sometimes forklifts and cranes. At the TA-16 Burn Ground, vehicles may be parked next to the Control Building (TA-16-389), driven on the TA-16 Burn Ground roads, or parked adjacent to the OB units.

A.2.3 Traffic Control Signals

Traffic control signals within TA-16 include stop signs, posted speed limits, and other traffic and pedestrian control signs. The locations of existing signs in the vicinity of the TA-16 Burn Ground are shown on Figure A-4.

A.2.4 Road Surfacing and Load-Bearing Capacity

Roads within TA-16 are generally two-lane roads with asphaltic-concrete surfaces. Load-bearing capacity for these roads is 32,000 pounds per axle. These roads are typically constructed with a 6-inch-thick base overlain with a 3-inch-thick asphaltic-concrete surface. These roads were designed and constructed to meet the American Association of State Highway and Transportation Officials (AASHTO) specification HS-20 (AASHTO, 1996).

A.3 LOCATION INFORMATION [20.4.1 NMAC § 270.14(b)(11)]

A.3.1 <u>Seismic Standard</u> [20.4.1 NMAC § 270.14(b)(11)(i and ii) and 20.4.1 NMAC § 264.18(a)] The OB units at the TA-16 Burn Ground are exempt from the seismic standards in 20.4.1 NMAC § 270.14(b)(11), and 20.4.1 NMAC § 264.18(a) [6-14-00], because they existed prior to November 19, 1980, the effective date of regulation for hazardous waste.

A.3.2 Floodplain Standard [20.4.1 NMAC §§ 270.14(b)(11)(iii through v) and 270.14(b)(19)(ii); 20.4.1 NMAC § 264.18(b)]

The OB units at TA-16 are located on top of a broad mesa. In accordance with 20.4.1 NMAC § 270.14(b)(11)(iii through v) [6-14-00], these hazardous waste management units are not located within the 100-year floodplain boundary. Additional floodplain information is provided in Appendix A of the LANL General Part B.

A.4 <u>TOPOGRAPHIC MAPS</u> [20.4.1 NMAC § 270.14(b)(19)]

Topographic maps and figures are provided herein or referenced to meet the requirements of 20.4.1 NMAC § 270.14(b)(19) [6-14-00]. The maps include the map scale, the date of preparation, and a north arrow. The maps and figures used to fulfill these regulatory requirements include the following:

- LANL-wide 100-year floodplain maps were provided as Appendix C of the "Response to Request for Supplemental Information: Technical Adequacy Review, RCRA Permit Application; General Part A, April 1998, Revision 0.0; General Part B, October 1998, Revision 1.0; Los Alamos National Laboratory, EPA ID No. NM0890010515" (LANL, 2001).
- A map showing surface waters, including intermittent streams, near the OB units at TA-16 is included as Figure A-5.
- Surrounding land uses are shown on Map 1 in the LANL General Part A.
- Wind roses for TA-6 and TA-49, the locations of the closest wind observation towers to TA-16, are shown on Figures A-6 and A-7.
- A map showing the legal boundaries of LANL (including TA-16) is provided as Map A-2 in the LANL General Part B.
- Access control features for TA-16 (e.g. fences, gates) are shown on Figure A-8.
- The locations of buildings, hazardous waste management units and structures, and loading and unloading areas at TA-16 are shown on Figure A-5.
- A map showing National Pollutant Discharge Elimination System discharge structure

locations is included as Map 2 in the LANL General Part A

 Storm, sanitary, and process sewer systems at LANL are shown on Map A-1 of the LANL General Part B.

• Drainage control features at the TA-16 Burn Ground are shown on Figure A-9.

 Fire stations serving LANL and the County of Los Alamos are shown on Figure E-2 of Appendix E in the LANL General Part B.

• The equipment cleanup area for LANL is located at TA-50-1. The location of TA-50-1 is shown on Figure 50-1 in the LANL General Part A.

Contour lines on all topographic maps are in intervals sufficient to detail natural drainage at LANL and in the vicinity of the waste management units. As provided in 20.4.1 NMAC § 270.14(b)(19) [6-14-00], LANL has submitted the maps to the New Mexico Environment Department at these scales and contour intervals due to the size of the waste management units, the extent of the LANL facility, and the topographic relief in the area.

A.5 <u>GROUNDWATER MONITORING</u> [20.4.1 NMAC § 270.14(c) and 20.4.1 NMAC § 264.90(a)]

Groundwater monitoring information is provided in Appendix A of the LANL General Part B.

A.6 OTHER PERMIT ACTIVITIES

Other types of Resource Conservation and Recovery Act permits include, but are not limited to, the following:

- Permits by Rule
- Emergency Permits
- Hazardous Waste Incinerator Permits
- Permits for Land Treatment Demonstrations Using Field Test or Laboratory Analyses
- Interim Permits for Underground Injection Control Program Wells
- Research, Development, and Demonstration Permits
- Permits for Boilers and Industrial Furnaces Burning Hazardous Waste

Currently, none of these permit types are relevant for the operations at TA-16.

A.7 REFERENCES

AASHTO, 1996, "Standard Specifications for Highway Bridges," 16th Edition, American Association of State Highway and Transportation Officials.

LANL, 2001, "Response to Request for Supplemental Information: Technical Adequacy Review, RCRA Permit Application; General Part A, April 1998, Revision 0.0; General Part B, October 1998, Revision 1.0, Los Alamos National Laboratory, EPA ID No. NM0890010515," LA-UR-01-6054, Los Alamos National Laboratory, Los Alamos, New Mexico.